

**COMMONWEALTH OF VIRGINIA
Department of Environmental Quality
Tidewater Regional Office**

STATEMENT OF LEGAL AND FACTUAL BASIS

Naval Medical Center, Portsmouth
620 John Paul Jones Circle, Portsmouth
Permit No. VA 60293

Title V of the 1990 Clean Air Act Amendments required each state to develop a permit program to ensure that certain facilities have federal Air Pollution Operating Permits, called Title V Operating Permits. As required by 40 CFR Part 70 and 9 VAC 5 Chapter 80, Naval Medical Center, Portsmouth has applied for a Title V Operating Permit for its naval hospital in Portsmouth. The Department has reviewed the application and has prepared a Title V Operating Permit.

Engineer/Permit Contact: _____ Date: _____

Air Permit Manager: _____ Date: _____

Regional Permit Manager: _____ Date: _____

FACILITY INFORMATION

Permittee

Naval Medical Center, Portsmouth
620 John Paul Jones Circle
Portsmouth VA 23708-2197

Facility

Naval Medical Center, Portsmouth
620 John Paul Jones Circle
Portsmouth VA 23708-2197

AIRS ID No. 51-740-00007

SOURCE DESCRIPTION

Applicable SIC Codes: 80 (Health Services), 806 (Hospitals), and 8062 (General Medical and Surgical Hospitals)

Naval Medical Center, Portsmouth (NMCP), is a federally owned facility operated by the United States Navy. This military hospital is a major source of sulfur dioxide (SO₂) and nitrogen oxides (NO_x), as defined in Title V of the 1990 Clean Air Act Amendments. NMCP is a minor source with respect to EPA's

New Source Review (NSR) Prevention of Significant Deterioration (PSD) program (reference an April 30, 1993, letter of concurrence from Ms Eileen M. Glen, Chief, NSR Section, EPA Region III, to Ms Karen Sismour at Tidewater Regional Office of DEQ). A PSD source previously, they now hold a state major NSR permit to construct and operate boilers and diesel engine generator sets, issued May 9, 2002, superseding NSR permits dated February 11, 1987, June 1, 1989, July 30, 1993, March 31, 1994, April 23, 1996, November 18, 1996, and July 7, 1997. NMCP is located in a metropolitan area defined as a PSD attainment area for all pollutants.

The medical facility provides acute and outpatient health care for armed forces personnel and dependents. Previous names for this facility were Portsmouth Naval Hospital, and Regional Medical Center, Portsmouth. Activities conducted by this stationary source to support the medical center's mission with potential for air emissions include utility steam production, backup electric power generation, organic liquid handling, woodworking, degreasing, and asbestos removal.

Industrial Boilers

The six industrial boilers at NMCP are used as steam generators for space heating. Four boilers between 24.0 and 37.6 million british thermal units (BTU)/hour heat input capacity (Boil-105 to 108) were installed between January, 1982, and June, 1987, and are therefore subject to new source rules in Chapter 50 of the Virginia Administrative Code (VAC) Section 9 VAC 5. Two 51.0 million BTU/hour boilers (Boil-109 and 110) were installed in November, 1994, and are therefore subject to Subpart Dc of the New Source Performance Standards (NSPS) in Title 40, Chapter 60 of the Code of Federal Regulations (40 CFR 60).

IC Engine Generator Sets

Six engine generator sets (ICGF-002 to 007) are the largest engines at the facility. They were installed in the boiler plant building in May, 1995, after their NSR permit was issued. They are used for electric cogeneration, electric peak shaving, and emergency power, and are governed to 1250 kilovolt-amps (KVA) each. Eight small engine generators, ranging in size from 100 kilowatts (kW) to 400kW, were installed for emergency power generation in buildings throughout the facility between 1986 and February, 1995. One 85 kW backup diesel fire pump (ICGF-012), installed in 1963, was removed in 1999, and replaced with a 230 kW diesel engine generator set using the same unit ID number. A 25 kW temporary emergency generator set, ICGF-021, was added as an insignificant emissions unit in 2002. All ten small engines are subject to new source rules in 9 VAC 5, Chapter 50.

As part of NSR for the six peaking generators (ICGF-002 to 007), a best available control technology (BACT) review was conducted for nitrogen oxides (NO_x), the primary pollutant. BACT was determined to consist of derating those engines to 1250 KVA to minimize NO_x. One year after permit issuance, the source requested an increase in the opacity limit for the six engines from 10% to 15% (with the same 20% allowed for up to 6 minutes in any one hour). The change was approved in an NSR modification. Maximum opacity allowed by 9 VAC 5, Chapter 50 regulations for new sources is 20% (30% allowed for up to 6 minutes in any one hour).

Distillate Oil Storage Tanks

The facility has 20 distillate oil storage tanks, one lubrication oil tank, and one waste oil tank. Since no construction dates were included in the application, three of the distillate fuel oil tanks are determined to be subject to 9 VAC 5-50-410 (in 9 VAC 5, Chapter 50, Article 5), Standards of Performance for New Stationary Sources, and 40 CFR 60, Subpart Kb (based on rated storage capacities) for recordkeeping and reporting purposes. No other federal provisions apply to these three tanks.

Gasoline Storage Tanks

The facility has two gasoline storage tanks, a 2,000 gallon Navy Public Works Center (PWC) tank, and 250 gallon Morale, Welfare, and Recreation (MWR) Division tank. The tanks are exempt from VAC requirements for tank vapor control efficiency and transfer vapor controls based on throughputs for each tank under 10,000 gallons/month.

Woodworking Shop Equipment

The Woodworking Shop is used by NMCP in support of normal maintenance activities to fabricate and repair wood components within the hospital facility. Equipment includes saws, planers, sanders, and drill presses. No NSR permit was required by DEQ at the time that the shop's equipment was initially purchased and operated. PM emissions are captured at pickup points by each device, and ducted to, and controlled by, a cyclone. The method of control is adequate for this facility, and there should be no visible emissions. Applicable VAC Chapter 40 requirements for capture and control of particulate matter are included in this permit, and a semiannual integrity check of the cyclone by the operator is specified.

Cold Cleaning Degreaser and Brake Cleaning Unit

A cold cleaning degreaser and a brake cleaning unit support maintenance activities. Applicable 9 VAC 5, Chapter 40 requirements for degreasers specify VOC control measures, degreasing practices, and waste disposal requirements, which are included in this permit.

Asbestos Removal

Several older NMCP buildings contain asbestos materials which could require repair or removal during any future renovations. Since asbestos removal procedures may be conducted in the future, applicable Federal Clean Air Act (CAA) asbestos removal requirements in NESHAP Subpart M are included in the permit to address demolition standards, waste disposal, and air cleaning.

COMPLIANCE STATUS

Naval Medical Center, Portsmouth, is inspected once each calendar year. The facility was last inspected February 20, 2001, and was determined to be in compliance. The NSR requirements for opacity have been revised to provide a more continuous means to assess compliance.

EMISSIONS UNIT IDENTIFICATION

Emissions units to be operated at this facility consist of the following :

Emissions Unit ID	Stack ID	Emissions Unit Description	Size/Rated Heat Input Capacity, mmBTU/hr	Maximum Rated Output (Note 1)	Applicable NSR Permit Date
Fuel Burning Equipment					
Boil-105	STBOIL-100	Nebraska Boiler NS-C-39S, 6/1/87	30.1	30,000 lb	5/9/02
Boil-106	STBOIL-100	Nebraska Boiler NS-C-39S, 3/15/86	36.0	30,000 lb	5/9/02
Boil-107	STBOIL-100	Nebraska Boiler NS-C-39, 9/15/83	37.6	30,000 lb	5/9/02
Boil-108	STBOIL-100	Nebraska Boiler NSB37, 1/15/82	24.0	20,000 lb	5/9/02
Boil-109	STBOIL-100	Cleaver Brooks Boiler 200-CT-7, Nov 94	51.0	40,000 lb	5/9/02
Boil-110	STBOIL-100	Cleaver Brooks Boiler 200-CT-7, Nov 94	51.0	40,000 lb	5/9/02
ICGF-002	STICGF-002, Bldg 20	Cummins Engine KTTA50-G2, May 95	10.2	1,000 kW (72%)	5/9/02
ICGF-003	STICGF-003, Bldg 20	Cummins Engine KTTA50-G2, May 95	10.2	1,000 kW (72%)	5/9/02
ICGF-004	STICGF-004, Bldg 20	Cummins Engine KTTA50-G2, May 95	10.2	1,000 kW (72%)	5/9/02
ICGF-005	STICGF-005, Bldg 20	Cummins Engine KTTA50-G2, May 95	10.2	1,000 kW (72%)	5/9/02
ICGF-006	STICGF-006, Bldg 20	Cummins Engine KTTA50-G2, May 95	10.2	1,000 kW (72%)	5/9/02
ICGF-007	STICGF-007, Bldg 20	Cummins Engine KTTA50-G2, May 95	10.2	1,000 kW (72%)	5/9/02
ICGF-008	STICGF-008, Bldg 215	Caterpillar Engine 3408B, 1989	4.50	380 kW	5/9/02
ICGF-009	STICGF-009, Bldg 215	Caterpillar Engine 3412, 1989	3.91	330 kW	5/9/02
ICGF-010	STICGF-010, Bldg 275	Caterpillar Engine 3408B, 1989	4.50	380 kW	5/9/02

Emissions Unit ID	Stack ID	Emissions Unit Description	Size/Rated Heat Input Capacity, mmBTU/hr	Maximum Rated Output (Note 1)	Applicable NSR Permit Date
ICGF-011	STICGF-011, Bldg 275	Cummins Engine NTA-855-G2, 1993	4.06	300 kW	5/9/02
ICGF-012	STICGF-012, Bldg 150	Caterpillar Engine 3306TA; 1999	2.41	230 kW	5/9/02
ICGF-013	STICGF-013, Bldg 273	Caterpillar Engine 3306B, 1991	2.44	180 kW	5/9/02
ICGF-015	STICGF-015, Bldg 273	Caterpillar Engine 3208, 1986	2.17	160 kW	5/9/02
ICGF-017	STICGF-017, Bldg 250	Caterpillar Engine 3406, Feb 95	3.73	300 kW	5/9/02
ICGF-019	STICGF-019, Bldg 274	Cummins Engine KTA-19T2, 1993	4.74	400 kW	5/9/02
Process A					
TNKA 009, 010, 011		Three distillate oil storage tanks	55,000 gallons each tank	NA	NA
Process B					
WOOD-001		Woodworking Shop	NA	NA	NA
Process C					
DEGS 001-002		Cold cleaning degreaser, and brake cleaning unit	NA	NA	NA
Process D					
AR-001		Asbestos removal projects	NA	NA	NA

Note 1: Output units are lb steam/hr for boilers, and kW (% of prime power) electrical output for IC engine generators.

EMISSIONS INVENTORY

2001 emissions are summarized in the following table.

2001 Actual Emissions

	Criteria Pollutant Emission in Tons/Year				
	VOC	CO	SO ₂	PM-10	NO _x
Facility Total	1.1	11.8	10.8	1.7	29.8

2001 Facility Hazardous Air Pollutant Emissions

Pollutant	Hazardous Air Pollutant Emissions in Tons/Year
	NONE REPORTED

EMISSIONS UNIT APPLICABLE REQUIREMENTS (6 BOILERS)

Limitations (Boilers)

A. The May 9, 2002, NSR permit has the following emissions-specific boiler requirements:

- ? NSR Condition 3: Emissions shall be controlled by proper operation and maintenance.
- ? NSR Condition 4: Boilers shall be constructed to allow for emissions testing upon reasonable notice at any time, using appropriate methods and test ports provided at appropriate locations.
- ? NSR Condition 5: The approved fuels are natural gas, and distillate fuel oil.
- ? NSR Condition 6: The six boilers, combined, shall consume no more than 700 million cubic feet of natural gas, or 5,430,000 gallons of distillate oil per year, calculated as the sum of each consecutive twelve-month period. When both fuels are consumed in the same year, consumption shall be limited as follows:
 Gallons of oil = 5,430,000 – (0.007 x cubic feet of natural gas)
 Cubic feet of natural gas = 700 million – (143 x gallons of oil)
- ? NSR Condition 7: The maximum sulfur content of fuel oil shall not exceed 0.5 percent by weight per shipment.
- ? NSR Condition 9: Emissions from four boilers (Boil-105 to 108) shall not exceed 0.014 pounds per million BTU (lb/mmbtu), or 1.8 lb/hr particulate matter (PM); 0.007 lb/mmbtu, or 0.9 lb/hr PM less than 10 microns in diameter (PM-10); 0.5 lb/mmbtu, or 65 lb/hr SO₂; 0.14 lb/mmbtu, or 18.1 lb/hr NO_x; 0.035 lb/mmbtu, or 4.5 lb/hr carbon monoxide (CO); and 0.003 lb/mmbtu, or 0.4 lb/hr volatile organic compounds (VOC).
- ? NSR Condition 10: Hourly emissions from boilers Boil-109 and 110 shall each not exceed 0.7 lb/hr TSP, 0.4 lb/hr PM-10, 26.5 lb/hr SO₂, 7.4 lb/hr NO_x, 1.8 lb/hr CO, and 0.1 lb/hr VOC.

- ? NSR Condition 11: Combined emissions from the six boilers (Boil-105 to 110) shall not exceed 5.4 tons TSP, 2.7 tons PM-10, 194.9 tons SO₂, 54.3 tons NO_x, 13.6 tons CO, and 1.0 ton VOC.
- ? NSR Condition 12: Visible emissions from the boilers shall not exceed 10% opacity, except during one 6 minute period in any one hour in which visible emissions shall not exceed 20% opacity, as determined by EPA Method 9. This condition exists at all times, except during startup, shutdown, and malfunction.
- ? NSR Condition 13: 40 CFR 60, NSPS Subpart Dc, is applicable to boilers Boil-109 and 110.

B. The following 40 CFR 60, NSPS Subpart Dc citations are determined to be applicable:

- ? 40 CFR 60c – Comply with boiler new source requirements in NSPS Subpart Dc.
- ? 40 CFR 60.42c(h)(1) & 60.42c(i)– Compliance with sulfur limits may be based on certification from fuel suppliers.
- ? 40 CFR 60.42c(d) & 60.42c(h)(1) – Specifies a boiler liquid fuel content limit of 0.5 wt% sulfur.

Periodic Monitoring (Boilers)

A. The NSR permit dated May 9, 2002, contains the following emissions-specific monitoring requirements for boilers:

- ? NSR Condition 7 – The permittee shall obtain a certification from the fuel supplier with each shipment of distillate oil. Each fuel supplier certification shall include the following:
 - a. The name of the fuel supplier;
 - b. The date on which the oil was received;
 - c. The volume of distillate oil delivered in the shipment; and
 - d. A statement that the oil complies with the American Society for Testing and Materials (ASTM) specifications for D398-76 fuel oil numbers 1 and 2.
- ? NSR Condition 8 –Boiler operators shall be trained in the proper operation of all such equipment. Training shall consist of a review and familiarization of the manufacturers' operating instructions, at minimum. The permittee shall maintain records of the required training including a statement of time, place and nature of training provided. The permittee shall have available good written operating procedures and maintenance schedules for the boilers. These procedures shall be based on manufacturers' recommendations, at minimum. All records required by this condition shall be made available for inspection by the DEQ upon request.
- ? NSR Condition 23 – The permittee shall maintain records of all emissions data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Tidewater Regional Office. These records shall include, but are not limited to:
 - Daily and annual natural gas and distillate oil use in each NSPS boiler (Boil-109 and Boil-110), monthly and annual natural gas and distillate oil use in four boilers (Boil-105 to Boil-108), and annual use of each fuel by the six boilers, combined, with annual totals calculated monthly as the sum of each 12 consecutive months;
 - All fuel supplier certifications; and
 - Written boiler operating procedures.

B. The following Virginia Administrative Codes with emissions-specific requirements have been determined to be applicable to boilers:

- ? 9 VAC 5-50-50- Recordkeeping requirements.
- ? 9 VAC 5-50-110- Visual observation requirements.
- ? 9 VAC 5-50-410- Fuel certification requirements.

C. The following 40 CFR 60, Subpart Dc citations are determined to be applicable to boilers:

- ? 40 CFR 60.48c(e) and (f) – Fuel certification requirements.
- ? 40 CFR 60.48c(e), (g), and (i) – Fuel certification recordkeeping requirements.

Periodic monitoring for boiler opacity is required. All boilers are normally operated together, and exhaust from a contiguous group of stacks. On a monthly basis, each boiler which has operated for a sufficient time each month to conduct an observation, will be required to operate individually, and visual observations completed. If opacity is indicated, the condition will be corrected, or a Method 9 visible emissions evaluation (VEE) performed.

No periodic monitoring for the emissions limits for criteria pollutants is required in the permit. The following demonstration is provided to show that there is not a great likelihood that the emissions limits will be exceeded.

Periodic Monitoring Demonstration

Example emissions unit size (Boiler 109) = 51 mmBtu/hr each (two Subpart Dc emissions units; the other four units are smaller heat input capacities)

Total heat input capacity for six units = 229.7 mmBtu/hr

Heating Value of Distillate Fuel = 140,000 Btu/gal

Sulfur Content of Fuel = 0.5%

Fuel Throughput = 5,430,000 gallons of distillate fuel combined

Hourly Throughput (example Boiler 109) = 51 mmBtu/hr / 140,000 Btu/gal=364 gal/hr per boiler

Total Maximum Hourly Throughput for six boilers: 1,640 gal/hr

Emission Factors from AP42 (Fuel Oil Combustion, 9/98) for Distillate Oil, and from compliance testing for CO and NOx):

Pollutant	Boil-105,106,108	Boil-107	Boil-109,110	[lb/1000 gal]
SO ₂	142S	142S	142S	[AP42, 9/98]
NO _x	13	10 (7/97 tests)	14 (12/95 tests)	[AP42,9/98:20]
CO	5.0 (AP42, 9/98)	2.0	2.0 (12/95 tests)	[1.2,B109; .2, B110]
PM	2.0 (AP42, 9/98)	2.0	2.0	
PM-10	1.0 (AP42, 9/98)	1.0	1.0	
VOC	0.2 (AP42, 9/98)	0.2	0.2	

SO₂ Emissions:

$((142) \times (0.5) / 1000) \text{ lb/gal} \times (364 \text{ gal/hr}) = \mathbf{25.9 \text{ lb/hr SO}_2 \text{ per boiler}}$

Title V permitted rate = **26.5 lb/hr SO₂ per boiler**

$((142) \times (0.5) / 1000) \text{ lb/gal} \times (5,430,000 \text{ gal/yr})/2000 \text{ lb/tn} = \mathbf{192.8 \text{ tn/yr SO}_2 \text{ for the plant}}$

Title V permitted rate = **194.9 tn/yr SO₂**

NO_x Emissions (from each of Boilers 109, and 110, as worst case, hourly):

$$((14 / 1000) \text{ lb/gal}) \times (364 \text{ gal/hr}) = \mathbf{5.1 \text{ lb/hr NO}_x \text{ per boiler}}$$

Title V permitted rate = **7.4 lb/hr NO_x per boiler**

$$((14 / 1000) \text{ lb/gal}) \times (5,430,000 \text{ gal/yr}) / 2000 \text{ lb/tn} = \mathbf{38.0 \text{ tn/yr NO}_x \text{ for the 6-boiler plant}}$$

Title V permitted rate = **54.3 tn/yr NO_x for the six-boiler plant**

CO Emissions (from each of Boilers 105, 106, and 108, as worst case, hourly):

$$((5 / 1000) \text{ lb/gal}) \times (364 \text{ gal/hr}) = \mathbf{1.8 \text{ lb/hr CO per boiler}}$$

Title V permitted rate = **1.8 lb/hr CO per boiler**

$$((5 / 1000) \text{ lb/gal}) \times (5,430,000 \text{ gal/yr}) / 2000 \text{ lb/tn} = \mathbf{13.6 \text{ tn/yr CO for the 6-boiler plant}}$$

Title V permitted rate = **13.6 tn/yr CO for the six-boiler plant**

PM Emissions:

$$((2 / 1000) \text{ lb/gal}) \times (364 \text{ gal/hr}) = \mathbf{0.7 \text{ lb/hr PM per boiler}}$$

Title V permitted rate = **0.7 lb/hr PM per boiler**

$$((2 / 1000) \text{ lb/gal}) \times (5,430,000 \text{ gal/yr}) / 2000 \text{ lb/tn} = \mathbf{5.4 \text{ tn/yr PM for the six-boiler plant}}$$

Title V permitted rate = **5.4 tn/yr PM for the six-boiler plant**

PM-10 Emissions:

$$((1 / 1000) \text{ lb/gal}) \times (364 \text{ gal/hr}) = \mathbf{0.4 \text{ lb/hr PM-10 per boiler}}$$

Title V permitted rate = **0.4 lb/hr PM-10 per boiler**

$$((1 / 1000) \text{ lb/gal}) \times (5,430,000 \text{ gal/yr}) / 2000 \text{ lb/tn} = \mathbf{2.7 \text{ tn/yr PM-10 for the 6-boiler plant}}$$

Title V permitted rate = **2.7 tn/yr PM-10 for the six-boiler plant**

VOC Emissions:

$$((0.2 / 1000) \text{ lb/gal}) \times (364 \text{ gal/hr}) = \mathbf{0.07 \text{ lb/hr VOC per boiler}}$$

Title V permitted rate = **0.1 lb/hr VOC per boiler**

$$((0.2 / 1000) \text{ lb/gal}) \times (5,430,000 \text{ gal/yr}) / 2000 \text{ lb/tn} = \mathbf{0.5 \text{ tn/yr VOC for the 6-boiler plant}}$$

Title V permitted rate = **1.0 tn/yr VOC for the six-boiler plant**

Based on the demonstration above, there is not a great likelihood that hourly emissions limits will be exceeded for the boilers, so no additional periodic monitoring other than opacity is specified.

Recordkeeping Thresholds (Boilers)

The source maintains daily records of fuel consumption of the six boilers in the facility, and uses AP42 and other emission factors to calculate hourly and annual emissions from the facility. The source will calculate emissions annually, and no additional periodic monitoring is required regarding compliance with each of the emission limits.

Testing (Boilers)

- A. The May 9, 2002, NSR permit contains no emissions testing requirements for boilers:
- B. The following 40 CFR 60, Subpart Dc, citations are determined to be applicable to boilers:
- ? 40 CFR 60.8 – Subpart A – Performance testing requirements.
 - ? 40 CFR 60.44c(h) – Fuel certification requirements to demonstrate SO₂ compliance.
 - ? 40 CFR 60.45c(a) – VEE requirements for particulate matter and opacity standards.
 - ? 40 CFR 60.45c(a) – Test methods.

Periodic visual observations are specified for boilers. Method 9 VEEs are to be conducted within one year of permit issuance, and as required to support the more frequent periodic visual observations. The boilers operate significantly below permit limits to allow for unanticipated demands. The facility fuel limits for boilers are 5.43 million gallons of diesel fuel oil per year, and 700 million cubic feet of natural gas. Because the source operates at annual emission rates considerably below permitted emission rates, emissions testing of boilers is not directed to assure compliance with annual emissions limits. Recordkeeping is specified as the primary method of periodic monitoring as discussed below.

Reporting (Boilers)

- A. The NSR permit dated May 9, 2002, contains the following boiler emissions reporting requirements:
- ? NSR Condition 24 – The permittee shall submit fuel quality reports for fuel fired in NSPS boilers Boil-109 and Boil-110 to the Director, Tidewater Regional Office within 30 days after the end of each semiannual period. If no shipments of distillate oil for those emissions units were received during the semiannual period, the semiannual report shall consist of dates included in the semiannual period, and a statement that no oil was received during the semiannual period. If distillate oil for those emissions units was received during the semiannual period, the reports shall include:
 - a. Dates included in the semiannual period;
 - b. Copies of fuel supplier certifications for all shipments of distillate oil for the two boilers received during the semiannual period, or a summary from each fuel supplier, that include information specified in Permit Condition III.B.2 for each shipment of distillate oil; and
 - c. A signed statement from the owner or operator of the facility that the fuel supplier certifications, or summaries of fuel supplier certifications, represent all of the distillate oil burned in the two boilers, or received at the facility for use in those emissions units.
- B. The following Virginia Administrative Code with emissions-specific reporting requirements has been determined to be applicable to boilers:
- ? 9 VAC 5-50-50- Recordkeeping requirements.
- C. The following citations in 40 CFR 60, Subpart Dc, have been determined to be applicable to boilers:
- ? 40 CFR 60.7 – Subpart A notification requirements.
 - ? 40 CFR 60.48c(b) – Submission of performance test data for particulate matter emissions.
 - ? 40 CFR 60.48c(d), (e), and (j) – Reporting requirements.

Streamlining of Applicable Requirements (Boilers)

- ? 40 CFR 60.48c(a) – Notifications made as required by 40 CFR 60.7.
- ? NSR Condition 5 – Title V Condition III.A.4 authorizes use of 0.05% sulfur on-highway diesel fuel in boilers as a pollution prevention measure.
- ? NSR Condition 7.d – Title V Condition III.B.2.d specifies, as a pollution prevention measure, that boiler fuel may include 0.05% sulfur content diesel fuel meeting “on-highway use” standards.
- ? NSR Condition 9 – Title V Condition III.A.7 specifies additional methods, to those in this NSR condition, to more clearly demonstrate compliance.
- ? NSR Condition 10 – Title V Condition III.A.8 specifies additional methods, to those in this NSR condition, to more clearly demonstrate compliance.
- ? NSR Condition 23 – Title V Condition III.B.4.a specifies fuel oils, instead of the more specific term, distillate oil, to clarify that fuel oil records should include the use of both distillate oil and any on-highway diesel.
- ? NSR Condition 24 – Title V Condition III.D.1 clarifies that fuel reports are semiannual. Conditions III.D.1.b and 1.c specify fuel oil instead of distillate oil, to clarify that the records include on-highway diesel fuel.

EMISSIONS UNIT APPLICABLE REQUIREMENTS (I.C. ENGINE GENERATOR SETS)

Limitations (Engine Generator Sets)

- A. The NSR permit dated May 9, 2002, contains the following emissions-specific requirements for I.C. engines:
- ? NSR Condition 3 – Engine generator set emissions shall be controlled by proper operation and maintenance.
 - ? NSR Condition 4 – Six engine generators (ICGF-002 to ICGF-007) shall be constructed so as to allow for emissions testing upon reasonable notice at any time, using appropriate methods. Test ports shall be provided at appropriate locations.
 - ? NSR Condition 14 – Nitrogen oxide emissions from each of six I.C. engine generator sets (ICGF-002 to ICGF-007) shall be controlled by the use, during all operations, of an electronic governor circuit on each engine designed to derate each engine from a maximum capacity of 1855 HP to 1450 HP. The generator is limited to 1250 KVA.
 - ? NSR Condition 15 – Fifteen engine generator sets (ICGF-002 to 013, 015, 017, and 019) shall be used to provide emergency electrical power to Naval Medical Center, Portsmouth, during interruptions of service, and for periodic testing. Six (6) engine generator sets (ICGF-002 to ICGF-007) may also be used to provide peaking power/co-generation.

- ? NSR Condition 16 – The approved fuel for engine generators ICGF-002 to 007 is distillate oil, defined as fuel oil that meets ASTM specifications for numbers 1 or 2 fuel oil. Approved fuels for emergency generators ICGF-008 to 013, 015, 017, and 019 are distillate oil and “on-highway” diesel. A change in fuels may require a permit to modify and operate.
 - ? NSR Condition 17 – Engine generators ICGF-002 to 013, 015, 017, and 019, combined, shall consume no more than 784,000 gallons of fuel per year, calculated monthly as the sum of each consecutive 12 month period.
 - ? NSR Condition 18 – The maximum sulfur content of oil to be burned in the engine generators shall not exceed 0.5 percent by weight per shipment.
 - ? NSR Condition 20 – Hourly emissions from six engine generators (ICGF-002 to ICGF-007), and annual emissions from engine generators ICGF-002 to 013, 015, 017, and 019, combined, shall not exceed 3.6 lb/hr and 19.6 tn/yr PM/PM-10; 5.4 lb/hr and 29.4 tn/yr SO₂; 33.2 lb/hr and 180.2 tn/yr NO_x ; 6.4 lb/hr and 35.0 tn/yr CO; 0.9 lb/hr and 5.1 tn/yr VOC.
 - ? NSR Condition 21 – Visible emissions at the common stack for each of six engine generator sets (ICGF-002 to ICGF-007) shall not exceed fifteen percent opacity, except during one 6-minute period in any one hour in which visible emissions shall not exceed twenty percent opacity, as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during start-up, shutdown and malfunction.
 - ? NSR Condition 22 – Visible emissions from the stacks of engine generators ICGF-008 to 013, 015, 017, and 019, shall not exceed twenty percent opacity, except during one 6-minute period in any one hour in which visible emissions shall not exceed thirty percent opacity, as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during start-up, shutdown, or malfunction.
- B. The following Virginia Administrative Code with emissions-specific requirements has been determined to be applicable to I.C. engines:
- ? 9 VAC 5-50-50- Recordkeeping requirements.
 - ? 9 VAC 5-50-110- Visible observation requirements.

Periodic Monitoring (Engine Generator Sets)

The I.C. engine generator sets operate significantly less than that permitted to allow for unanticipated demands. IC engine generator sets ICGF-002 through 007 operate between 100 and 200 hours per year. Generator sets ICGF-008 through ICGF-019 have operated 10 to 20 hours per year. The facility fuel limit of 784,000 gallons of diesel fuel oil per year would be sufficient for 1577 hr/yr for each of six (6) I.C. engines ICGF-002 through 007, and 500 hr/yr for each of I.C. engines ICGF-008 to 013, 015, 017, and 019. Recordkeeping is specified as the primary method of periodic monitoring as discussed below.

There are no federal regulations applicable to the IC engine generators.

The following Virginia Administrative Codes are other applicable requirements that apply to the source:

9 VAC 5 Chapter 50	New and Modified Stationary Sources
9 VAC 5 Chapter 50	Article 1: Visible Emissions and Fugitive Dust/Emissions
9 VAC 5 Chapter 80	Part I: Permits for New and Modified Sources
9 VAC 5 Chapter 80	Article 1: Federal Operating Permits for Stationary Sources
9 VAC 5 Chapter 80	Article 2: Permit Program Fees for Stationary Sources
9 VAC 5 Chapter 170	General Administration

Periodic Monitoring Demonstration

The following demonstration is provided to show that there is not a great likelihood that the hourly emission limits in section IV.A.6 of the Title V permit will be exceeded:

AP42 Emission Factors from Section 3.4, Large Stationary Diesel and All Stationary Dual-fuel Engines:

PM = 0.1 lb/mmBtu
SO₂ = 1.01S lb/mmBtu, where S = weight percent of sulfur in the fuel
NO₂ - 1.9 lb/mmBtu
CO - 0.85 lb/mmBtu
VOC - 0.0819 lb non-methane VOC/mmBtu
Weight percent of sulfur = 0.5
Emission Units ICGF-002 through 007 = 10.2 mmBtu/hr, each

Particulate Matter Emissions from ICGF-002 through 007, each:

PM = 0.1 lb/mmBtu x 10.2 mmBtu/hr = **1.0 lbs/hr, each**
Title V permitted rate = **3.6 lbs/hr PM, each**

Sulfur Dioxide Emissions from ICGF-002 through 007, each:

SO₂ = [(1.01)(0.5) lb/mmBtu] x 10.2 mmBtu/hr = **5.1 lbs/hr, each**
Title V permitted rate = **5.4 lbs/hr, each**

Nitrogen Dioxide Emissions from ICGF-002 through 007, each:

NO₂ = 1.9 lb/mmBtu x 10.2 mmBtu/hr = **19.4 lbs/hr each**
Title V permitted rate = **33.2 lbs/hr, each**

Carbon Monoxide Emissions from ICGF-002 through 007, each:

CO - 0.85 lb/mmBtu x 10.2 mmBtu/hr = **8.7 lbs/hr, each**
Title V permitted rate = **6.4 lbs/hr, each**

VOC Emissions from ICGF-002 through 007, each:

VOC-0.0819 lb VOC/mmBtu x 10.2 mmBtu/hr=**0.84 lb VOC/hr, each**
Title V permitted rate = **0.9 lbs/hr, each**

Visual emission monitoring has been added to prove compliance with the opacity limit in the permit.

Fuel supplier certifications and training records are required to be kept.

Recordkeeping Requirements (Engine Generator Sets)

A. The NSR permit dated May 9, 2002, contains the following emissions-specific recordkeeping requirements for I.C. engines:

- ? NSR Condition 18 – The permittee shall obtain a certification from the fuel supplier for all deliveries of distillate oil. Such certification may cover one or more deliveries of distillate oil from the same supplier. Each fuel supplier certification for fuel delivery shall include:
 - a. The name of the fuel supplier;
 - b. The date on which the distillate oil was received;
 - c. The volume of distillate oil delivered in the shipment; and
 - d. A statement that the distillate oil complies with the American Society for Testing and Materials specifications for numbers 1 or 2 fuel oil, or a statement that fuel oil used in engine generators is diesel fuel meeting “on-highway use” standards.
- ? NSR Condition 19 – Operators shall be trained in the proper operation of all such equipment. Training shall consist of a review and familiarization of the manufacturer’s operating instructions, at minimum. The permittee shall maintain records of the required training including a statement of time, place and nature of training provided. The permittee shall have available good written operating procedures and maintenance schedules for the engines. These procedures shall be based on manufacturer’s recommendations, at minimum. All records required by this condition shall be made available for inspection by the DEQ upon request.
- ? NSR Condition 23 – The permittee shall maintain records of all emissions data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Tidewater Regional Office. These records shall include, but are not limited to:
 - Monthly and annual fuel used in six engine generators (ICGF-002 to ICGF-007), with annual fuel calculated as the total of the previous 12 consecutive months, combined, based on engine fuel meter records;
 - Calculated monthly and annual diesel fuel used for emergency engine generators (ICGF-008 to ICGF-013, 015, 017, and 019), with annual fuel calculated as the total of the previous 12 consecutive months, combined, based on engine operating hour meter log records, and a maximum assumed hourly fuel rate for each engine based on each engine’s maximum rated heat input capacity;
 - Records of maximum electric load production levels for engines ICGF-002 to 007 sufficient to demonstrate continuing compliance with NSR condition 14;
 - All fuel supplier certifications; and
 - Written operating procedures for boilers (Boil-105 to Boil-110) and peaking engine generator sets (ICGF-002 to ICGF-007).

Recordkeeping Thresholds (Engine Generator Sets)

The source maintains fuel use records on the six large engine generators (ICGF-002 to 007), using a fuel meter on each engine. The source maintains written records on hours of operation on the small I.C. engine generators (ICGF-008 to 019), and calculates gallons of fuel consumed based on each engine's maximum rated capacity, although the units seldom operate at those levels. Therefore, monthly fuel consumption records are conservative. As long as total annual recorded fuel consumption of the engines, as recorded monthly, remains less than 50 percent of the permitted amount of fuel, the source will calculate emissions annually, and no additional periodic monitoring is required regarding compliance with each of the emission limits. If recorded fuel consumption of all IC engines combined, during any 12 consecutive months, exceeds 50 percent of the annual rolling engine fuel limit, the permit requires the source to commence monthly emission calculations to insure adequate continuing compliance. The source will continue monthly calculations to demonstrate compliance of each rolling total for at least 6 months after the month in which recorded fuel consumption falls below 50 percent of the annual rolling limit.

- B. The following Virginia Administrative Code with emissions-specific requirements has been determined to be applicable for I.C. engines:

? 9 VAC 5-50-110- Periodic visual observation requirements.

Testing Requirements (Engine Generator Sets)

Periodic visual observations are specified in Condition IV.B.1 to be conducted on I.C. engines. Method 9 VEEs will be conducted annually, and at other times as required by this permit, or directed by DEQ.

- A. The NSR permit dated May 9, 2002, contains no emissions testing requirements. Testing was completed after the NSR permit was initially issued, and the conditions were deleted.
- B. The following Virginia Administrative Codes with emissions-specific requirements have been determined to be applicable for I.C. engines:

? 9 VAC 5-50-30- Testing requirements for new sources.
? 9 VAC 5-80-110- Test methods.

Reporting Requirements (Engine Generator Sets)

Annual reporting of compliance with the Title V permit for I.C. engines is specified in Title V General Condition D.

Streamlining of Applicable Requirements (Engine Generator Sets)

- ? NSR Condition 16 – Title V Condition IV.A.3 is revised to allow use in engine generators of 0.05% sulfur on-highway diesel fuel as engine fuel as a pollution prevention measure.
- ? NSR Condition 18.d – Title V Condition IV.B.2.d specifies, as a pollution prevention measure, that fuel oil used by engine generators (ICGF-002 to 013, 015, 017, and 019) may be 0.05% sulfur content diesel fuel meeting “on-highway use” standards.

- ? NSR Condition 20 – Title V Condition IV.A.6 lists conditions that may show compliance with hourly emission limits, including one non-NSR condition; lists conditions that may show compliance with annual emission limits, including one non-NSR condition; and deletes a reference to NSR condition 15, because compliance with that condition does not contribute to demonstrations of compliance with emission limits.
- ? NSR Condition 23 – Title V Condition IV.B.4.a specifies fuel oils, instead of the more specific term, distillate oil, to clarify that a record of fuel oil use (distillate oil and on-highway diesel) is required.

EMISSIONS UNIT APPLICABLE REQUIREMENTS (Distillate Oil Storage Tanks)

Limitations (Oil Tanks)

The following citation from 40 CFR 60, Subpart Kb, has been determined to be applicable to distillate oil storage tanks:

- ? 40 CFR 60.110b – Federal new source requirements for distillate oil tanks.

Periodic Monitoring Requirements- Recordkeeping (Oil Tanks)

The following recordkeeping citations from 40 CFR 60, Subpart Kb, have been determined to be applicable to distillate oil storage tanks:

- ? 40 CFR 60.116b (a) – Record retention periods.
- ? 40 CFR 60.116b (b) – Content of records.

EMISSIONS UNIT APPLICABLE REQUIREMENTS (Woodworking Shop, WOOD-1)

Limitations (Woodworking Shop)

The following Virginia Administrative Codes with emissions specific requirements have been determined to be applicable for woodworking emissions units:

- ? 9 VAC 5-40-2270 A- Minimum PM control requirements for woodworking operations.
- ? 9 VAC 5-40-2270 B- PM Limit for woodworking operations.
- ? 9 VAC 5-50-80- Visual emission limits for new sources.
- ? 9 VAC 5-80-110- Periodic visual observations.

Periodic Monitoring- Recordkeeping (Woodworking Shop)

The following Virginia Administrative Code with emissions specific requirements has been determined to be applicable for woodworking emissions units:

? 9 VAC 5-80-110 E- Recordkeeping requirements.

Woodworking Shop emissions: Controlled emissions are not visible, and by engineering judgement, are assumed to be less than 5 grains/dscf. Exhaust flow was tested at a maximum rate of 30.49 cuft/min.

Maximum potential hourly emissions are therefore:

$30.49 \text{ cuft/min} \times 0.05 \text{ gr/dscf} \times \text{lb/7000 grains} \times 60 \text{ min/hr} = 0.0131 \text{ lb PM/hr}$

Maximum potential annual emissions are:

$0.0131 \text{ lb PM/hr} \times 8760 \text{ hr/yr} \times \text{ton/2000 lb} = 0.057 \text{ tons PM/yr}$

Since the potential for emissions is small, no limits are assigned. Periodic monitoring for this emissions unit is proposed as visual observations of emissions from emissions units and the control device, and corresponding recordkeeping consisting of log entries at least once per operating month to insure no visible emissions are present, and to correct and log occurrences of malfunctions as needed.

EMISSIONS UNIT APPLICABLE REQUIREMENTS (Cold Cleaning Degreaser and Brake Cleaning Unit)

Limitations (Degreaser and Brake Cleaner)

The following Virginia Administrative Codes with emissions-specific requirements have been determined to be applicable for the cold cleaning degreaser and brake cleaning unit:

- ? 9 VAC 5-40-3280 C – VOC control efficiency for degreaser and brake cleaner.
- ? 9 VAC 5-40-3290 C.1(a-e) – VOC emission controls for degreaser and brake cleaner.
- ? 9 VAC 5-40-3290 C.2 – Operating practices for degreaser and brake cleaner.
- ? 9 VAC 5-40-3290 D – Waste disposal for degreasing and brake cleaning.

Periodic Monitoring Requirements- Recordkeeping (Degreasers)

The following Virginia Administrative Code with emissions-specific requirements has been determined to be applicable for cold cleaning degreasers:

- ? 9 VAC 5-80-110 E – Inspection records are a required part of periodic monitoring for degreasers.

EMISSIONS UNIT APPLICABLE REQUIREMENTS (Asbestos Removal)

Limitations (Asbestos Removal)

The following citations from 40 CFR 61, Subpart M, have been determined to be applicable for asbestos removal operations:

- ? 40 CFR 61.145 – Licensing and training requirements for asbestos removal.
- ? 40 CFR 61.150 – Waste disposal requirements for asbestos removal.
- ? 40 CFR 61.152 – Air cleaning requirements for asbestos removal.

Periodic Monitoring Requirements- Recordkeeping (Asbestos Removal)

The following Virginia Administrative Code with emissions-specific requirements has been determined to be applicable for asbestos removal:

- ? 9 VAC 5-80-110 E – Recordkeeping is the proposed periodic monitoring method.

FACILITYWIDE APPLICABLE REQUIREMENTS

Limitations (Facilitywide)

A. The NSR permit of May 9, 2002, contains the following emissions-specific facilitywide requirements:

- ? NSR Condition 1 – Except as specified in this permit, the permitted facility is to be modified and operated as represented in the permit application dated May 18, 1992, including amendment sheets dated September 10, 1992, November 5, 1992, February 3, 1994, February 17, 1994, June 27, 1995, July 18, 1995, September 28, 1995, November 21, 1995, December 28, 1995, March 1, 1996, March 11, 1996, March 21, 1996, April 16, 1996, September 18, 1996, May 21, 1997, January 31, 2002, April 23, 2002, and May 9, 2002. Any changes in permit application specifications or existing facilities which alter the impact of the facility on air quality may require a permit. Failure to obtain such a permit prior to construction may result in enforcement action.
- ? NSR Condition 30 – Annual requirements to fulfill legal obligations to maintain current stationary source emissions data will necessitate a prompt response by the permittee to requests by the DEQ or the Board for information to include, as appropriate: process and production data; changes in control equipment; and operating schedules. Such requests for information from the DEQ will either be in writing or by personal contact. The availability of information submitted to the DEQ or the Board will be governed by applicable provisions of the Freedom of Information Act, §§ 2.1-340 through 2.1-348 of the Code of Virginia, § 10.1-1314 (addressing information provided to the Board) of the Code of Virginia, and 9 VAC 5-170-60 of the State Air Pollution Control Board Regulations. Information provided to federal officials is subject to appropriate federal law and regulations governing confidentiality of such information.

B. The following Virginia Administrative Codes with emissions-specific facilitywide requirements have been determined to be applicable:

- ? 9 VAC 5-20-70 – Circumvention requirements.
- ? 9 VAC 5-20-160 – Registration requirements.
- ? 9 VAC 5-50-20, and 50-80 – VEE standards for new sources.

Periodic Monitoring Requirements- Recordkeeping (Facilitywide)

The following Virginia Administrative Code with emissions-specific requirements has been determined to have facilitywide applicability:

- ? 9 VAC 5-50-50 – Summary of general recordkeeping requirements for the facility.

Reporting Requirements (Facilitywide)

The following Virginia Administrative Code with emissions-specific emission requirements has been determined to have facilitywide applicability:

- ? 9 VAC 5-50-50 – Summary of general facilitywide reporting requirements.

Streamlining of Applicable Requirements (Facilitywide)

None.

GENERAL CONDITIONS

The permit contains general conditions required by 40 CFR Part 70 and 9 VAC 5-80-110, that apply to all Federal-operating permit sources. These include requirements for submitting semi-annual monitoring reports and an annual compliance certification report. The permit also requires notification of deviations from permit requirements or any excess emissions, including those caused by upsets, within one business day.

Comments on General Conditions

General Condition B: Permit Expiration

This condition refers to the Board taking action on a permit application. The Board referred to is the State Air Pollution Control Board. The authority to take action on permit applications has been delegated to the Regions as allowed by ' 2.1-20.01:2 and ' 10.1-1185 of the *Code of Virginia*, and the "Department of Environmental Quality Agency Policy Statement No. 3-2001".

This general condition cites the entire Articles that follow:

- B.2. Article 1, Part II of 9 VAC 5 Chapter 80. Federal Permits for Stationary Sources (9 VAC 5-80-50 et seq.)
- B.3. Article 1, Part II of 9 VAC 5 Chapter 80. Federal Permits for Stationary Sources (9 VAC 5-80-50 et seq.)

This general condition cites the sections that follow:

- B. 9 VAC 5-80-80. "Application"
- B.2. 9 VAC 5-80-150. "Action on Permit Applications"
- B.3. 9 VAC 5-80-80. "Application"
- B.4. 9 VAC 5-80-80. "Application"
- B.4. 9 VAC 5-80-140. "Permit Shield"
- B.5. 9 VAC 5-80-80. "Application"

General Condition F: Failure / Malfunction Reporting

Section 9 VAC 5-20-180 requires malfunction and excess emissions reporting within 4 hours. Section 9 VAC 5-80-250 also requires malfunction reporting; however, reporting is required within 2 days. Section 9 VAC 5-20-180 is from the general regulations. All affected facilities are subject to this section including Title V facilities. Section 9 VAC 5-80-250 is from the Title V regulations. Title V facilities are subject to both sections. A facility may make a single report that meets the requirements of 9 VAC 5-20-180 and 9 VAC 5-80-250. The report must be made within 4 day time business hours of the malfunction.

This general condition cites the sections that follow:

F.	9 VAC 5-40-50.	Notification, Records and Reporting
F.	9 VAC 5-50-50.	Notification, Records and Reporting

General Condition U: Malfunction as an Affirmative Defense

The regulations contain two reporting requirements for malfunctions that coincide. The reporting requirements are listed in sections 9 VAC 5-80-250 and 9 VAC 5-20-180. The malfunction requirements are listed in General Condition U and General Condition F. For further explanation see the comments on General Condition F.

This general condition cites the sections that follow:

U.2.d.	9 VAC 5-80-110.	Permit Content
U.2.d.	9 VAC 5-20-180.	Facility and Control Equipment Maintenance or Malfunction

FUTURE APPLICABLE REQUIREMENTS

There are no future applicable requirements for this source.

PERMIT SHIELD AND INAPPLICABLE REQUIREMENTS

Section X of the permit lists inapplicable requirements including their citations, and applicability descriptions. The permit shield provided by the permit covers only those applicable requirements covered by terms and conditions in the permit, and those items listed as not being applicable to this permitted facility.

INSIGNIFICANT EMISSIONS UNITS

Insignificant emissions units are presumed to be in compliance with all requirements of the Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping or reporting shall be required for these emissions units in accordance with 9 VAC 5-80-110.

The following emissions units at the facility are identified in the application as insignificant emissions units under 9 VAC 5-80-720:

Emissions Unit No.	Emissions Unit Description	Citation Code*	Pollutant(s) Emitted (5-80-720 B)	Capacity (5-80-720C)
FREN-001	Freon Recovery Unit	2	CFC-12	NA
FREN-002	Freon Recovery Unit	2	HCFC-123	NA
FREN-003	Freon Recovery Unit	2	CFC-12, CFC-22	NA
FREN-004	Freon Recovery Unit	2	CFC-12, CFC-22	NA
FREN-005	Freon Recovery Unit	2	CFC-12, CFC-22	NA
GSTA-001	Vehicle Maintenance Facility Gasoline/Diesel Pumping Tank	2	2,2,4-Trimethylpentane, Benzene, Ethylbenzene, Hexane, Toluene, VOC, Xylenes (mixed isomers)	NA
LABS-ALL	Laboratory Hoods in the Acute Care Facility	2	Formaldehyde, Methanol, VOC, Xylenes (mixed isomers)	NA
LABS-012	Still Room, Sterilization Material Recycling Process in the Central Energy Plant (Bldg 20)	2	Formaldehyde, VOC, Xylenes (mixed isomers)	NA
MISC-003	Masonry Shop	1	PM, PM ₁₀	NA
OCOM-ALL	Space Heaters (<0.3 mmBTU/hr)	1	Carbon monoxide, PM, PM ₁₀ , NO _x , SO _x , VOC	NA
TNKA-002	Horizontal Fixed Roof, Distillate Fuel Oil No. 2 Storage Tank	2	VOC	NA

Emissions Unit No.	Emissions Unit Description	Citation Code*	Pollutant(s) Emitted (5-80-720 B)	Capacity (5-80-720C)
TNKA-003	Horizontal Fixed Roof, Distillate Fuel Oil No. 2 Storage Tank	2	VOC	NA
TNKA-008	Horizontal Fixed Roof, Distillate Fuel Oil No. 2 Storage Tank	2	VOC	NA
TNKA-018	Horizontal Fixed Roof, Distillate Fuel Oil No. 2 Storage Tank	2	VOC	NA
TNKA-019	Horizontal Fixed Roof, Distillate Fuel Oil No. 2 Storage Tank	2	VOC	NA
TNKA-020	Gasoline Storage Tank-2,000 gal	2	VOC	NA
TNKA-022	Horizontal Fixed Roof, Distillate Fuel Oil No. 2 Storage Tank	2	VOC	NA
TNKA-024	Horizontal Fixed Roof, Distillate Fuel Oil No. 2 Storage Tank	2	VOC	NA
TNKA-025	Horizontal Fixed Roof, Distillate Fuel Oil No. 2 Storage Tank	2	VOC	NA
TNKA-026	Horizontal Fixed Roof, Distillate Fuel Oil No. 2 Storage Tank	2	VOC	NA
TNKA-027	Horizontal Fixed Roof, Distillate Fuel Oil No. 2 Storage Tank	2	VOC	NA
TNKA-028	Horizontal Fixed Roof, Distillate Fuel Oil No. 2 Storage Tank	2	VOC	NA
TNKA-029	Horizontal Fixed Roof, Distillate Fuel Oil No. 2 Storage Tank	2	VOC	NA
TNKA-030	Horizontal Fixed Roof, Distillate Fuel Oil No. 2 Storage Tank	2	VOC	NA
TNKA-031	Gasoline Storage Tank-250 gal	2	VOC	NA
TNKA-032	Horizontal Fixed Roof, Distillate Fuel Oil No. 2 Storage Tank	2	VOC	NA
TNKA-004	Horizontal Underground, Distillate Fuel Oil No. 2 Storage Tank	2	VOC	NA

Emissions Unit No.	Emissions Unit Description	Citation Code*	Pollutant(s) Emitted (5-80-720 B)	Capacity (5-80-720C)
TNKU-006	Horizontal Underground, Distillate Fuel Oil No. 2 Storage Tank	2	VOC	NA
TNKU-007	Horizontal Underground, Distillate Fuel Oil No. 2 Storage Tank	2	VOC	NA
TNKU-013	Horizontal Underground, Lubrication Oil Storage Tank	2	VOC	NA
TNKU-014	Horizontal Underground, Waste Oil Storage Tank	2	VOC	NA
SOLD-001	Soldering/Brazing	1	PM, PM10	NA
WELD-001	Welding Rods: A) 14Mn-4Cr, B) E70S, C) ER316, D) 4043.	1	PM, PM10	NA
WSTL-001	Tank Secondary Containment Oil/Water Separator for TNKA-010	2	VOC	NA
WSTL-002	Tank Secondary Containment Oil/Water Separator for TNKA-011	2	VOC	NA
ICGF-021	Olympian Emergency Engine Generator Set, D25P2, Bldg 215	2	Products of Combustion	25 kW

*Citation Codes: 1 Named insignificant emissions unit
 2 Insignificant by virtue of emission levels
 3 Insignificant by size or production level (rated capacity)

CONFIDENTIAL INFORMATION

The permittee did not submit a request for confidentiality. All portions of the Title V application are suitable for public review.

PUBLIC PARTICIPATION

A public notice regarding the draft permit appeared in the 8/21/02 edition of the Virginian Pilot newspaper. Public comments were solicited from 8/21/01 through 9/20/02, and no comments were received from the public during the 30-day public comment period, or from EPA during the 45-day proposed permit review period that ended October 5, 2002.